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RAILROAD COMMISSION OF TEXAS
OIL AND GAS DIVISION

August 30, 2016

Mr. William K. Honker, P.E.
Acting Director
Water Quality Protection Division
Environmental Protection Agency, Region VI
1445 Ross Avenue, Suite 1200
Dallas, TX 75202-2733

Re: Water Quality Certification, Draft NPDES Permit No. TX0007587
Chevron Phillips Chemical, Clemens Terminal
2611 County Road 314, Brazoria, Brazoria County, Texas

Dear Mr. Honker:

The Railroad Commission of Texas (RRC) has examined the above referenced draft permit and statement of basis in response to the public notice. This permit would replace the permit previously issued in 2012.

The applicant operates a salt dome storage facility for light hydrocarbons. The underground storage caverns are used for storage by displacement of the hydrocarbons using brine. Brine is stored in a series of aboveground ponds. Water is pumped from the San Bernard River into a brine production cavern, when additional brine is needed. It is then pumped into either of the product storage caverns or one of the brine storage ponds. Brine from the caverns or the storage cavern is treated to remove entrained gases prior to being routed to a brine storage pond. Brine is then transferred from the brine storage ponds to the final pond prior to being discharged to the San Bernard River via Outfall 001. Due to severity of drought conditions, flows in the San Bernard River have decreased such that the facility is not able to discharge from the terminal. As a result, the permittee has tied into a ConocoPhillips pipeline at a point where it passes through Clemens terminal. The pipeline is used to carry excess brine with the refinery effluent to the Brazos River. Discharges occur only when the facility has excess brine. ConocoPhillips operates a petroleum refinery in Sweeny from which treated effluent is pumped through a 26 mile, 2-inch pipeline that discharges to the tidally-influenced zone of the Brazos River approximately 1.25 miles south of the SH 36 river crossing. The route of the existing pipeline from the Sweeny Complex to the Brazos River passes through the Clemens Terminal property.

Products stored in the underground storage caverns include the following: normal Butane, iso-Butane, iso-Pentane, Hydrogen, Fuel Gas, Propane, Ethane-Propane mix, Butanes-Butylenes mix, Natural Gas Liquids (NGL), Propylene and Ethylene. The facility also treats Ethylene, Propylene, Propane and normal- and iso-Butane for sales. These four products are treated through a molecular sieve bed for the removal of carry-over water resulting during storage. Propylene is also treated for the removal of carbon dioxide, carbonyl sulfide, and arsine.

Wastewater discharges from the facility flow from Outfall 001 into San Bernard River Tidal in Waterbody Segment Code No. 1301 of the Brazos – Colorado Basin. The facility also discharges from outfall 004 into the Brazos River Tidal in Waterbody Segment Code No. 1201 of the Brazos River Basin.

Stormwater is discharged through Outfall 002 and 003; however it is permitted under TPDES Multi-Sector General Permit for Industrial Activity. Because the facility is under the jurisdiction of the RRC, the permittee is in the process of applying for coverage under EPA's Multi-Sector General Permit for Stormwater Discharges Associated with Industrial Activity.

This permit would modify the previous permit by:
1. including language on the Sufficiently Sensitive Methods;
2. including electronic DMR reporting requirements;
3. establishing water quality-based effluent limitations at Outfall 001 as a result of RP to exceed the applicable WQS for mercury, benzidine and thallium. (Analyses provided did not meet the MQL for mercury and benzidine.);
4. establishing water quality-based effluent limitations at Outfall 004 as a result of RP to exceed the applicable WQS for mercury, benzidine, copper and thallium. (Analyses provided did not meet the MQL for mercury, benzidine and copper); and
5. including a 36-month compliance schedule for Whole Effluent Toxicity (WET) testing for *Mysidopsis bahia* at Outfall 001 with a limit of 5%.

The applicant submitted comments in a letter dated June 24, 2016. The applicant commented that it does not believe that the addition of water quality-based limits for the new parameters is necessary or appropriate for either Outfall 001 or Outfall 004. The applicant stated that it has conducted additional sampling for the parameters in question and made a correction to an error in the effluent data concentration that was originally submitted with the permit application. The updated sampling results for each parameter is summarized in the attached table and compared to the 70%/85% criteria for the calculated limits.

The correct mercury result for sample collected on November 15, 2016, was less than 0.0820 µg/l. This result is below 70% of the calculated daily average limit. The correct benzidine result was less than 0.58 µg/l, which is an order of magnitude lower than the MQL. There is no reason for benzidine to be in the sample. Resampling for thallium resulted in a non-detect result. The average of the two results is less than 3.4 µg/l, which is below 70% of the calculated daily average limit. The applicant requested that the limits for mercury, benzidine, and thallium be removed from the permit for both Outfall 001 and Outfall 004.

Resampling for copper resulted in a concentration of 15.0 µg/l and the average of the two sample resuls is 18.25 µg/l, which is less than 85% of the calculated limit but more than 70%. Therefore, the numeric limit for copper should be replaced with a report only requirement.

The applicant commented that, if water quality-based effluent limits are removed from the permit, the permit should be revised to remove the requirement to file progress reports.

With respect to toxicity testing, the applicant stated that TRE investigation determined that a potassium deficiency is the primary cause of subleathal toxicity and is awaiting review and approval from EPA. The applicant commented that the WET testing requirements and limits be replaced with the reporting only condition currently in the permit.

The proposed permit constitutes a Federal Action that could affect the land and water use of the coastal zone of Texas. The federal Coastal Zone Management Act of 1972 (CZMA, reauthorized in 1990) requires review by the State of any federal action that affects the land and water use of the State's coastal zone. The Texas Coastal Management Program boundary, as defined at 31 Tex. Admin. Code §503.1, delineates the Texas coastal zone. The Railroad Commission is the State agency responsible for determining consistency with the TCMP with respect to actions covering activities associated with the exploration, development, and production of oil, gas, or geothermal resources that could affect land and water use of the Texas Coastal Zone. Furthermore, the TCMP policies for discharges of wastewater from oil and gas exploration and production activities include a requirement that all discharges comply with the provisions of the Texas surface water quality standards (31 Tex. Admin. Code §§501.14 and 506.12). The Railroad Commission of Texas is the certifying State agency for federal actions with respect to permits covering activities associated with the exploration, development, and production of oil, gas, or geothermal resources that may result in discharges to waters of the United States within the boundaries of the State of Texas.

The Railroad Commission has reviewed this proposed action for consistency with the TCMP goals and policies, in accordance with the regulations of the TCMP, and has found that the proposed action will not have a direct and significant adverse effect on any coastal natural resource area identified in the applicable policies, and has determined that the proposed action is consistent with the applicable goals and policies of the TCMP. As part of the

TCMP review, the Railroad Commission examined the draft permit and has identified no conflicts between the proposed permit and applicable state water quality laws. Our review indicates that, based on the information contained in the draft permit and public notice, there is a reasonable assurance that the permitted activities will be conducted in a manner which will not violate any applicable water quality requirements. The Railroad Commission also finds that no conditions more stringent than those in the draft permit would be necessary to comply with state water quality laws. Therefore, the Railroad Commission hereby grants certification of the referenced permit for compliance with applicable state water quality laws. The proposed permit could be made less stringent and still not be in violation of state water quality standards or result in an inconsistency with the Texas Coastal Management Program if it were revised to address the applicant's concerns in its letter dated June 24, 2016.

Please call me at (512) 463-7308 if you have any questions.

Sincerely yours,

Leslie Savage, Water Quality Certification Agent
Oil and Gas Division

Cc: Chevron Phillips Chemical
Clemens Terminal
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